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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,603	07/30/2003	William F. Micka	TUC920030006US1	8680

7590 03/10/2006

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EXAMINER

CHANNAVAJJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
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2166

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,603

Applicant(s)

MICKA ET AL.

Examiner

Srirama Channavajjala

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/30/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Drawings

2. The Drawings filed on 7/30/2003 are acceptable for examination purpose.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because fig 1 though fig 3 they do not include the LABEL for the reference number mentioned in the specification, for example fig 1, 101A, 101B corresponds to first cluster and second cluster, element 132 processor, 134 corresponds to cache, 142 corresponds to processor, 144 corresponds to cache and like. A proposed drawing correction, corrected drawings, to add the Label[s] to respective reference sign(s) to figs 1 though fig 3 are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

4. The information disclosure statement filed on 7//30/2003 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 11-19,20-28 are rejected under 35 U.S.C. 101 because invention is directed to non-statutory subject matter.

6. Regarding independent claim 11: Claim 11 employ "An article of manufacture comprising a computer usable medium having computer readable program....., which encompasses a software-only embodiment. The preamble language of claim 11 therefore merely describes a computer program per se. As such, this raises a question as to whether each step[s] of the claim 11 is directed merely to an abstract idea that is not tied to a technological art, environment or machine, which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 USC 101.

One technique for satisfying the requirements of 35 USC 101 is to claim software code residing in memory [i.e. hardware], wherein that code produces a tangible result.

REMARKS:

Examiner recommends applicant amend the preamble to overcome 35 USC 101.

Claim 11: Preamble:

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"An article of manufacture comprising a computer useable medium having computer readable program code disposed therein to provide information from a first data storage device to a second data storage device, the computer readable program code comprising a series of computer readable program **instructions [step] which, when executed, cause a computer to carry out a process including the steps of:**

Claims 12-19 are also rejected under 35 USC 101 in the analysis of the claim 11.

7. Regarding independent claim 20: Claim 20 preamble reads "A computer program product usable with a provide information from a first data storage device to a second data storage device, comprising: which encompasses a software-only embodiment. The preamble language of claim 20 therefore merely describes a computer readable program product in light of the specification. As such, this raises a question as to whether each step[s] of the claim 20 is directed merely to an abstract idea that is not tied to a technological art, environment or machine, which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 USC 101.

REMARKS:

Examiner recommends applicant amend the preamble to overcome 35 USC 101. It is also noted that in the preamble is missing essential element "programmable computer processor"

Claim 20 preamble:

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“A computer program product useable with a **programmable computer processor**, **said product, comprising a computer useable medium having computer readable program code disposed therein to provide information from a first data storage device to a second data storage device, said computer readable program code comprising:**

Claims 21-28 are also rejected under 35 USC 101 in the analysis claim 20 above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01.

9. In the Claim 20, preamble is directed to: “A computer program product usable with a **[omitted element: programmable computer processor]** provide information from a first data storage device to a second data storage device, comprising:

In the present office action, examiner assumes “programmable computer processor in the preamble, because at page 28, line 3 reads: “computer readable program code which causes said programmable computer processor.....”

Appropriate correction is required in response to this office action

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohno et al. [hereafter Ohno], US Patent No. 6950915 filed on March 21, 2003 and issued on Sept 27,2005..

12. As to claim 1, 11, 20, Ohno teaches a system which including 'a method to provide information to multiple data storage devices' [fig 1, element 13, element 13b], multiple data storage devices corresponds to Ohno's fig 1, element 13a-13b;

'providing a first data storage device and a second data storage device, wherein said first data storage device is capable of communicating with said second data storage device' [fig 1, col 6, line 30-37], first storage and second storage devices or units connected to each other though communication link element 63 as detailed in fig 1

'providing first information to said first data storage device at a first time' [col 7, line 12-13,col 10, line 39-40];

'providing second information to said first data storage device' [col 7, line 12-20, col 7, line 28-32];

'determining if said second information comprises a synchronous copy attribute'
[col 9, line 1-3, col 7, line 28-32];

'operative if said second information comprises a synchronous copy attribute,
synchronously providing said first information to said second data storage device' [col 7,
line 36-45];

'operative if said second information does not comprise a synchronous copy
attribute, providing said first information to said second data storage device at a second
time, wherein said second time is later than said first time' [col 9, line 56-63, line 66-67,
col10, line 1-9, fig 6], Ohno specifically teaches synchronous copy attribute and
associated attribute information as detailed in fig 6.

13. As to claim 2, 12,21, Ohno disclosed 'second information comprises a
synchronous copy attribute[fig 6, col 9, line 66-67],and wherein said first data storage
device comprises a first information storage medium, and wherein said second data
storage device comprises a second information storage medium, [fig 1]

'writing said first information to said first information storage medium' [col 8,
line 28-31]

'writing said first information to said second information storage medium' [col 8,
line 31-37];

'determining if said first information has been written to both said first information
storage medium and to said second information storage medium' [col 8, line 31-37,
line 51-58];

'operative if said first information has been written to both said first information storage medium and to said second information storage medium, generating third information' [col 9, line 47-55,,col 12, line 57-60].

14. As to claim 3, 13,22, Ohno disclosed 'first information is provided to said first data storage device by a host computer [col 4, line 65-67, col 5, line 1-6, col 8, line 28-31] and wherein said third information comprises a write complete signal, further comprising the step of providing said write complete signal to said host computer' [col 8, line 52-58,col 12, line 57-60].

15. As to claim 4, 14,23, Ohno disclosed 'second information does not comprise a synchronous copy attribute [col 11, line 52-55] and wherein said first data storage device comprises a first information storage medium' [col 4, line 47-52];

'writing said first information to said first information storage medium' [col 8, line 28-31]

'determining if said first information has been written to said first information storage medium' [col 8, line 31-37];

'operative if said first information has been written to said first information storage medium, generating third information' [col 9, line 47-55,,col 12, line 57-60, col 13, line 1-3].

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16. As to claim 5, 15,24, Ohno disclosed 'first information is provided by a host computer capable of communicating with said first data storage device [fig 1, col 4, line 65-67, col 5, line 1-6, col 8, line 28-31], and wherein said third information comprises a write complete signal, further comprising the step of providing said write complete signal to said host computer' [col 8, line 52-58,col 12, line 57-60].

17. As to claim 6, 16,25, Ohno disclosed 'second data storage device comprises a second information storage medium' [fig 1, element 11b];

'scheduling the transmission of said first information to said second data storage device' [col 4, line 53-64];

'providing said first information to said second data storage device' [col 7, line 9-11];

'writing said first information to said second information storage medium' [col 9, line 49-55].

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18. As to claim 7, 17,26, Ohno disclosed 'determining if said first information must be synchronously provided to said second data storage device' [col 7, line 28-32];

'operative if said first information must be synchronously provided to said second data storage device, generating a write command comprising said synchronous copy attribute, wherein said write command comprises said second information' [col 9, line 56-63].

19. As to claim 8, 18,27, Ohno disclosed 'second information need not be synchronously copied to said second data storage device, comprising the step of generating a write command comprising an asynchronous copy attribute' [col 7, line 36-42,col 10, line 17-22].

20. As to claim 9, Ohno disclosed 'providing a computer' [fig 1, element 61];
'generating said first information by said computer' [fig 1, col 5, line 51-54].

21. As to claim 10,19,28, Ohno disclosed 'saving said first information in said memory'[fig 1, col 5, line 43-46];

'determining if said first information should be provided to said first data storage device' [col 8, line 31-37];

'operative if said first information should be provided to said first data storage device, providing said first information from said memory to said first data storage device'[col 9, line 47-55,,col 12, line 57-60, col 13, line 1-3].

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Conclusion


The prior art made of record

a. US Patent No. 6950915

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SC
Patent Examiner.
March 4, 2006.


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER